

Carcinus maenas

European shore crab, Green crab

Threat Scores

- 1. Ecological Impact
 - Preys upon and dominates native species; also has visible negative effects on habitat and fisheries
 - The crab is able to crush mussels and shows a clear potential to negatively threaten mussel farms
 - The voracious predator in some locations of its introduced range, has caused the decline of other crab and bivalve species
- 2. Invasive Potential
 - Research data strongly suggest that the introductions to Oregon, Washington and British Columbia occurred through larval transport via strong ocean currents associated with an unusually large El Nino event in 1997 and 1998



- In addition, spatial data on captured European green crabs in Willapa Bay and Grays Harbor suggest that Coriolis forces may have influenced larval transport by deflecting planktonic European green crab larvae to the south entrance of each bay mouth
- 3. Geographic Extent
 - Found in long stretches across ecoregions
 - Regionally pervasive
- 4. Management Difficulty
 - Numerous management techniques suggested, including restrictions and more stringent shellfish importation regulations
 - Requires significant ongoing management

Geography and Habitat

- 1. Native: Northwestern Europe, including western Baltic Sea
- 2. Introduced: Pacific Coast from Alaska to California, Hawai'i
- 3. Habitat
 - Marine, estuaries, bays, intertidal zones
 - Any kind of seashore in shallow waters including estuaries
 - Prefers sheltered areas
 - Common in salt marshes, sandy beaches, and rocky shores
 - Able to tolerate a wide range of salinities (as low as 6 ppt)

Invasion Pathways

- 1. Pet, aquarium, and water garden trade, possibly intentional release
- 2. Ballast water and sediments
- 3. Aquaculture and mariculture activities, use as bait
- 4. Packing materials for live bait
- 5. Live seafood trade
- 6. Natural spread, El Nino and Coriolis forces

Non-Native Locations

- 1. 55- North American Pacific Fijordland
- 2. 56- Puget Trough/Georgia Basin
- 3. 57- OR, WA, Vancouver
- 4. 58- Northern California
- 5. 59- Southern California Bight
- 6. 152- Hawaiian Islands

Sources

- 1. http://upload.wikimedia.org/wikipedia/commons/1/17/Carcinus_maenas.jpg
- 2. Molnar, Jennifer et al. 2008. Assessing the global threat of invasive species to marine biodiversity. Frontiers in Ecology and the Environment. Vol. 6, No. 9, pp. 485-492.
- 3. http://conserveonline.org/workspaces/global.invasive.assessment